

Application No.:09/851,510
Amendment dated: April 13, 2004
Reply to Office Action of 01/14/04

a.) Amendments to Specification

Replace the paragraph beginning at page 2, line 22, in the specification as originally filed, with the following rewritten paragraph:

The present invention is directed to a MOEMS device and corresponding fabrication process in which absorbing material along the optical axis of the device is removed. The result is a suspended optical coating, such as a dielectric thin film mirror stack. Such optical coatings can have very low absorption. Thus, the invention can materially lower the net absorption in the devices, and thereby improves performance by, for example, reducing signal power dependencies. --

Replace the paragraph beginning at page 4, line 11, in the specification as originally filed, with the following rewritten paragraph:

The location of the deflectable membrane structure on the outside of the cavity prevents intracavity losses, but renders the device susceptible to instability in operation. The magnitude of light transmitted through the material can change dramatically as the filter's resonance is tuned on and off a signal of interest. This is avoided in the present invention by providing the optical port through the deflectable structure.

Replace the paragraph beginning at page 10, line 11, in the specification as originally filed, with the following rewritten paragraph:

The mode field diameter of the lowest order mode of light resonating in the cavity between the stationary mirror structure 150 and the membrane mirror structure 230 is a function of the spacing between the mirror structures and the mirror curvatures. The port 314 is sized to be preferably greater than the mode field diameter of this lowest order mode to thereby prevent aperturing and related losses.